

COMPLETE LISTING OF CLAIMS
IN ASCENDING ORDER WITH STATUS INDICATOR

1. (Currently Amended) Method for the removal of particulate matter from aqueous suspension comprising steps of:

establishing value of pH of the suspension and of Zeta potential of particles in the suspension;

providing a porous ceramic filter having a membrane layer consisting of at least a metal-oxide with a Zeta potential at the pH value of the suspension having same polarity of the Zeta potential as the particles in the suspension; and

passing the suspension through the porous filter; and withdrawing a filtrate.

2. (Cancelled)

3. (Original) Method according to claim 1, wherein the suspension is passed in cross-flow through the filter.

4. (Original) Method according to claim 1, wherein the particles comprise yeast cells.

5. (Original) Method according to claim 1, wherein the suspension is selected from beer and wine.

6. (Currently Amended) System for cross-flow microfiltration of an aqueous suspension of particles to be retained, said particles having a sign of polarity and said aqueous suspension having a pH value, said system comprising a porous ceramic filter having a membrane layer consisting of a least one metal-oxide, said membrane layer having a Zeta potential with the same sign of polarity as the particles at the pH value of the aqueous suspension during filtration, and a pump for pumping the aqueous suspension through the porous ceramic filter, wherein Zeta potential of the membrane layer has the same sign of polarity as the particles to be retained at pH value of the aqueous suspension during filtration.

7. (New) Method according to claim 1, wherein the pH of the suspension is about 3-4, the Zeta potential of the particles in the suspension has a positive polarity, and the metal-oxide is TiO_2 (anatase).

8. (New) Method according to claim 1, wherein the pH of the suspension is about 4-5, the Zeta potential of the particles in the suspension has a positive polarity, and the metal-oxide is selected from the group consisting of TiO_2 (anatase), ZrO_2 , and Al_2O_3 .

9. (New) Method according to claim 1, wherein the pH of the suspension is about 5-7, the Zeta potential of the particles in the suspension has a positive polarity, and the metal-oxide is selected from the group consisting of ZrO_2 , Al_2O_3 , and MgAl_2O_4 .

10. (New) Method according to claim 1, wherein the pH of the suspension is about 7-8, the Zeta potential of the particles in the suspension has a positive polarity, and the metal-oxide is selected from the group consisting of ZrO_2 and MgAl_2O_4 .

11. (New) Method according to claim 1, wherein the pH of the suspension is about 8-9, the Zeta potential of the particles in the suspension has a positive polarity, and the metal-oxide is MgAl_2O_4 .

12. (New) Method according to claim 1, wherein the pH of the suspension is about 9-10, the Zeta potential of the particles in the suspension has a positive polarity, and the metal-oxide is MgAl_2O_4 (400°C).

13. (New) Method according to claim 1, wherein the pH of the suspension is about 3-4, the Zeta potential of the particles in the suspension has a negative polarity, and the metal-oxide is selected from the group consisting of TiO_2 (rutile) and WO_3 .

14. (New) Method according to claim 1, wherein the pH of the suspension is about 4-5, the Zeta potential of the particles in the suspension has a negative polarity, and the metal-oxide is selected from the group consisting of TiO_2 (rutile), WO_3 , and SiO_2 .

15. (New) Method according to claim 1, wherein the pH of the suspension is about 5-6, the Zeta potential of the particles in the suspension has a negative polarity, and the metal-oxide is selected from the group consisting of TiO_2 (rutile) and WO_3 .

16. (New) Method according to claim 1, wherein the pH of the suspension is about 6-8, the Zeta potential of the particles in the suspension has a negative polarity, and the metal-oxide is TiO₂ (anatase)